Smart gas sensor arrays powered by artificial intelligen

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Citation Report

#	Article	IF	CITATIONS
1	More Data, Please: Machine Learning to Advance the Multidisciplinary Science of Human Sociochemistry. Frontiers in Psychology, 2020, 11, 581701.	2.1	7
2	Metal oxides nanowires chemical/gas sensors: recent advances. Materials Today Advances, 2020, 7, 100099.	5.2	46
3	Highly selective gas sensing enabled by filters. Materials Horizons, 2021, 8, 661-684.	12.2	45
4	Detection of low PPM of volatile organic compounds using nanomaterial functionalized reduced graphene oxide sensor. AIP Conference Proceedings, 2021, , .	0.4	3
5	Preparation and gas-sensing properties of very thin sputtered NiO films. Journal of Electrical Engineering, 2021, 72, 61-65.	0.7	6
6	Wireless Self-Powered High-Performance Integrated Nanostructured-Gas-Sensor Network for Future Smart Homes. ACS Nano, 2021, 15, 7659-7667.	14.6	90
7	Transfer Learning based Approach for Mixture Gas Classification. Journal of Korean Institute of Industrial Engineers, 2021, 47, 144-159.	0.1	0
8	Taking the leap between analytical chemistry and artificial intelligence: A tutorial review. Analytica Chimica Acta, 2021, 1161, 338403.	5.4	75
9	Graphene oxide nanocomposites based room temperature gas sensors: A review. Chemosphere, 2021, 280, 130641.	8.2	31
10	Design and fabrication of effective gradient temperature sensor array based on bilayer SnO2/Pt for gas classification. Sensors and Actuators B: Chemical, 2022, 351, 130979.	7.8	11
11	Photoactivated materials and sensors for NO ₂ monitoring. Journal of Materials Chemistry C, 2021, 9, 16804-16827.	5.5	16
12	Formation and detection of hydrogen fluoride gas during fire fighting scenarios. Fire Safety Journal, 2022, 127, 103489.	3.1	7
13	Deep learning for gas sensing using MOFs coated weakly-coupled microbeams. Applied Mathematical Modelling, 2022, 105, 711-728.	4.2	7
14	Semiquantitative Classification of Two Oxidizing Gases with Graphene-Based Gas Sensors. Chemosensors, 2022, 10, 68.	3.6	5
15	Large-sized α-MoO3 layered single crystals for superior NO2 gas sensing. Applied Surface Science, 2022, 586, 152793.	6.1	11
16	Selectivity in trace gas sensing: recent developments, challenges, and future perspectives. Analyst, The, 2022, 147, 1024-1054.	3.5	11
17	Evolution Law and Mechanism of Freeze–Thaw Damage of Cement-Stabilized Weathered Sand. Coatings, 2022, 12, 272.	2.6	2
18	Simultaneous Detection of CO and NH ₃ Gases at Room Temperature with an Array of ZnS Chemiresistive Sensors and the Superposition Principle. Analytical Chemistry, 2022, 94, 4602-4609.	6.5	10

CITATION REPORT

#	Article	IF	CITATIONS
19	Real-time isooctane and pentane gas identification based on machine learning analysis techniques. , 2021, , .		0
20	Detection of pest using Odor substance based on Deep Learning Algorithms. , 2021, , .		0
21	Skin bioelectronics towards long-term, continuous health monitoring. Chemical Society Reviews, 2022, 51, 3759-3793.	38.1	85
22	The Pest FAW Infestation Detection in Maize Fields using Deep Learning. , 2022, , .		0
23	Multichannel convolution neural network for gas mixture classification. Annals of Operations Research, 0, , 1.	4.1	1
24	Recent Trends in Al-Based Intelligent Sensing. Electronics (Switzerland), 2022, 11, 1661.	3.1	8
25	Biocompatible liquid metal coated stretchable electrospinning film for strain sensors monitoring system. Science China Materials, 2022, 65, 2235-2243.	6.3	14
26	Low fabrication cost wavelength tunable WG-FP hybrid-cavity laser working over 1.7 μm. Journal of Semiconductors, 2022, 43, 062302.	3.7	0
27	Nanotube- and nanowire-based sensors for air quality monitoring. , 2022, , 307-345.		0
28	Microheater Integrated Nanotube Array Gas Sensor for Parts-Per-Trillion Level Gas Detection and Single Sensor-Based Gas Discrimination. ACS Nano, 2022, 16, 10968-10978.	14.6	29
29	Artificially Intelligent Nanoarray Detects Various Cancers by Liquid Biopsy of Volatile Markers. Advanced Healthcare Materials, 2022, 11, .	7.6	5
30	A Scoping Review on Wearable Devices for Environmental Monitoring and Their Application for Health and Wellness. Sensors, 2022, 22, 5994.	3.8	8
31	The rise of AI optoelectronic sensors: From nanomaterial synthesis, device design to practical application. Materials Today Physics, 2022, 27, 100812.	6.0	12
32	Temperatureâ€Modulated Selective Detection of Partâ€perâ€Trillion NO ₂ Using Platinum Nanocluster Sensitized 3D Metal Oxide Nanotube Arrays. Small, 2022, 18, .	10.0	15
33	Machine Learning-Assisted Gas-Specific Fingerprint Detection/Classification Strategy Based on Mutually Interactive Features of Semiconductor Gas Sensor Arrays. Electronics (Switzerland), 2022, 11, 3884.	3.1	0
34	CuO-decorated MOF derived ZnO polyhedral nanostructures for exceptional H2S gas detection. Chemosphere, 2023, 317, 137827.	8.2	39
35	A Review on Artificial Intelligence Chip. , 2022, 1, 99-109.		0
26	Introduction to papole-pose 2023 29-55		0

#	Article	IF	Citations
π 37	TSMC-Net: Deep-Learning Multigas Classification Using THz Absorption Spectra. ACS Sensors, 2023, 8,	7.8	5
37	1230-1240.	7.8	0
38	WS ₂ and WS ₂ -ZnO Chemiresistive Gas Sensors: The Role of Analyte Charge Asymmetry and Molecular Size. ACS Sensors, 2023, 8, 1630-1638.	7.8	11
39	A Review on Artificial Intelligence Chip. , 2022, 1, 99-109.		0
40	Machine Learning in Impedance-Based Sensors. , 2023, , 263-279.		0
41	Recent progress in hybrid conducting polymers and metal oxide nanocomposite for room-temperature gas sensor applications: A review. Sensors and Actuators A: Physical, 2023, 359, 114472.	4.1	10
42	Evaluation of Smart Home Systems and Novel UV-Oriented Solution for Integration, Resilience, Inclusiveness & Sustainability. , 2022, , .		0
43	Potential of Carbon Nanotube Chemiresistor Array in Detecting Gas-Phase Mixtures of Toxic Chemical Compounds. Nanomaterials, 2023, 13, 2199.	4.1	0
44	Recent Progress in Multifunctional Gas Sensors Based on 2D Materials. Chemosensors, 2023, 11, 483.	3.6	1
45	Multifunctional Materials for the Sensing of Gases. Advances in Chemical and Materials Engineering Book Series, 2023, , 128-158.	0.3	0
46	A Review of Sensing Technologies for New, Low Global Warming Potential (GWP), Flammable Refrigerants. Energies, 2023, 16, 6499.	3.1	0
47	Advances of Nano-Enabled ZnFe2O4 Based-Gas Sensors for VOC Detection and Their Potential Applications: A Review. Processes, 2023, 11, 3122.	2.8	0
49	Discriminative Detection of Different Cigarette Brands Using a Fast-Response Electronic Nose. ACS Omega, 2023, 8, 46034-46042.	3.5	0
50	High-performance flexible organic gas sensor via alkyl side chain engineering of polyalkylthiophene. Chemical Engineering Journal, 2024, 480, 147962.	12.7	0
51	Deep-learning assisted biomimetic self-powered wireless electronic noses system enabled by triboelectric discharge. Nano Energy, 2024, 121, 109156.	16.0	0
52	A mechanistic review on machine learning-supported detection and analysis of volatile organic compounds for food quality and safety. Trends in Food Science and Technology, 2024, 143, 104297.	15.1	0
53	Flicker Noise in Resistive Gas Sensors—Measurement Setups and Applications for Enhanced Gas Sensing. Sensors, 2024, 24, 405.	3.8	0
54	Biomimetic olfactory chips based on large-scale monolithically integrated nanotube sensor arrays. Nature Electronics, 2024, 7, 157-167.	26.0	0
55	AWG-spectrometer to analyze absorption spectra of optical gas sensors fabricated by femtosecond laser processing. AIP Conference Proceedings, 2024, , .	0.4	0

CITATION REPORT

#	Article	IF	CITATIONS
56	Review—Recent Progress in the Design of Chemical Hydrogen Sensors. Journal of the Electrochemical Society, 2024, 171, 017510.	2.9	0
57	Real-time, noise and drift resilient formaldehyde sensing at room temperature with aerogel filaments. Science Advances, 2024, 10, .	10.3	0
58	Preparation of laser induced periodic surface structures for gas sensing thin films and gas sensing verification of a NiO based sensor structure. Journal of Electrical Engineering, 2024, 75, 24-28.	0.7	0
59	Non-equilibrium Green's function analysis of charge plasma-based source-drain electrode P-type MoTe2 MOSFET for high sensitivity hydrogen sensing. , 2024, 189, 207823.		0